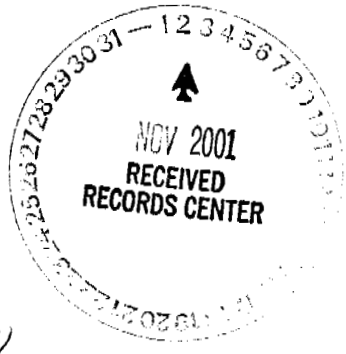
Lead Compliance Plan
707/776/777 Closure Project

Rocky Flats Environmental Technology Site

Prepared by
707/776/777 Closure Project

Revision 1
May 2001



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This Lead Compliance Plan has been reviewed and approved.

Terry Vaughn, Project ESH&Q — 5/22/01 Date

Mark Zachary, IH&S Team Lead — 05/22/01 Date

LEAD COMPLIANCE PLAN

707/776/777 Closure Project

1.0 PURPOSE

The purpose of this plan is to minimize potential worker exposure to lead and inorganic lead compounds in a manner consistent with the requirements set forth by the OSHA Lead Standard. This Lead Compliance Plan has been written to satisfy the requirements of Chapter 20 of the Occupational Safety & Industrial Hygiene Program Manual (OSIHPM). This plan applies to all subcontractors working within the 707/776/777 Cluster.

2.0 SCOPE OF WORK

The work to be performed under this Plan includes cutting various pieces of equipment that contain lead painted surfaces in building 707/776/777, removing lead shielding from gloveboxes, demolition of drywall that contains lead painted surfaces, lead characterization (sampling), and demolition of lead painted buildings.

The crew will consist of three (3) to seven (7) employees. Hand tools to be used could include: spray bottles, hammers, chisels, sawzall, nibbler, heat gun, shears, scrapers, and wire brushes. Heavy equipment may also be used in the demolition of buildings.

3.0 GOOD HOUSEKEEPING PRACTICES

Removal of loose dust on work surfaces, to the extent practical, will be performed to maintain a clean work area. Surfactant, where practical and feasible, will be used to control lead dust and adhesive from becoming airborne. When applicable a HEPA vacuum may be used to pick up pieces of lead paint. The area will be maintained free of clutter and unnecessary equipment which could cause unsafe conditions, (i.e. tripping hazard).

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4.0 GENERAL WORK PRACTICES

If a small amount of cutting is made, the effected area will be taped or peel away will be used to cover the lead surface. Good housekeeping practices will be implemented to maintain surfaces as free as practical from accumulation of lead during the course of lead work. General work practices when dismantling equipment will include unbolting and unscrewing all the pieces of equipment to try to minimize cutting of lead surfaces to the extent possible.

NOTE: The use of compressed air to remove lead dust from any surface is prohibited.

5.0 EXPOSURE ASSESSMENT

An initial determination of employee's exposure to lead is to be performed on any new task on lead painted surfaces. Monitoring will continue to be performed on employees who may be exposed to the greatest airborne concentration of lead or who are representative of a job classification's exposure. Personal air samples representative of a full shift in the affected work area will be collected, to the extent possible. Full shift personal samples will be collected by Industrial Hygiene as feasible and shall be representative of the monitored employee's regular, daily exposure to lead. All air samples shall be analyzed by an AIHA accredited laboratory using NIOSH or OSHA procedures.

If continuous employee exposure monitoring results are below 30 $\mu g/m^3$ as lead or lead compounds, no further sampling is required unless there is a change in materials or work practices. If the initial monitoring shows personal exposure to lead at or above 30 $\mu g/m^3$ but below 50 $\mu g/m^3$, personal exposure sampling must be performed every six months. Results in excess of 50 $\mu g/m^3$ will require personal exposure sampling every 12 weeks as specified in the OSIHPM.

From previous glovebox work, air monitoring data shows that removing lead (hand chisel) shielding from gloveboxes does not expose workers to airborne levels at the action level. An assessment of the sampling of paint, removal of lead sheeting from

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gloveboxes, and other surfaces indicates these activities do not create an airborne lead hazard.

6.0 EMPLOYEE NOTIFICATION

Within 5 working days after receipt of personal air sampling results, employees shall be notified in writing of their exposure, and the corrective measures taken to reduce that exposure, if applicable.

7.0 RESPIRATORY PROTECTION

Respirators will be selected from Appendix I on the basis of actual or anticipated exposure levels. Refer to 29 CFR 1926.62(d)(2) for specific tasks and anticipated exposure levels. All negative pressure air purifying respirators shall be fitted with high efficiency particulate air (HEPA) filters. Quantitative fit tests shall be performed at the time of initial fitting and annually thereafter.

8.0 PERSONAL PROTECTIVE CLOTHING

Employees shall wear work coveralls when performing lead work. For exposures at or above the (PEL) permissible exposure level and as interim protection employees shall wear disposable coveralls (Tyvek) or similar full-body work clothing to include coveralls, gloves, head covers, and shoe coverlets. Any additional PPE will be for radiation exposure identified on the Radiological Work Permit (RWP).

Disposable protective clothing and equipment, that is worn where employees are exposed to lead in excess of the PEL or as interim protection for employees performing tasks as specified in paragraph (d)(2) of 29 CFR 1926.62 (i.e. manual scraping. torch cutting), must be placed in a container at a designated change area prior to leaving the work area. The container must be labeled "CAUTION: CLOTHING CONTAMINATED WITH LEAD. DO NOT REMOVE DUST BY BLOWING OR SHAKING".

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Employees shall not leave the work area wearing potentially lead contaminated work clothing. Showers, hand washing facilities, and a clean dressing area are provided in Building 707/776/777 or designated shower area.

All employees are prohibited from smoking, eating or chewing tobacco in the work areas.

9.0 MEDICAL SURVEILLANCE

Medical surveillance will be provided to any employee who may be occupationally exposed on any day to lead in concentrations that are at or above the action level as specified in the OSIHPM Chapter 20.

10.0 TRAINING

All employees shall receive hazard communication training pursuant to 29 CFR 1926.59 prior to working with lead or lead compounds. Each employee that may be exposed to lead above the action limit will also receive additional training to include the following:

- Nature of the work.
- The hazards of lead and its effect to employee health.
- Proper use of respirator.
- Medical surveillance program.
- Contents of this compliance plan.

Employee training will be conducted by course #019-574-01 or equivalent. Proper documentation will be made each time this training is given.

A copy of the OSHA Lead Standard 29 CFR 1926.62 shall be made available upon employee request.

The work area where exposure to lead at or above the action level is possible, shall be barricaded and warning signs placed frequently around the barricaded area to warn

other employees. The work area will have controlled points of access. Controls will be implemented to prevent lead contaminated airborne dust from escaping the work areas.

If the PEL is exceeded warning signs shall be posted and state 'WARNING"; "LEAD WORK AREA"; "POISON"; "NO SMOKING OR EATING". All signs shall meet the requirements of 29 CFR 1926.62(m)

11.0 RECORD KEEPING

All employee exposure sampling and medical records shall be maintained by Occupational Health for the duration of employment plus 30 years.

APPENDIX 1

RESPIRATORY PROTECTION FOR LEAD EXPOSURE

Airborne concentration of lead or condition of use.	Required respirator.
Not in excess of 500 $\mu g/m^3$.	Half face Air-purifying respirator with HEPA filters.
Not in excess of 2,250 $\mu g/m^3$.	Full face air-purifying respirator with HEPA filters or Full face Powered air-purifying respirator with HEPA filters.
Not in excess of 50,000 $\mu g/m^3$.	Supplied air respirator with pressure demand or other positive pressure mode.
Not in excess of 100,000 $\mu g/m^3$.	Full face supplied air respirator with pressure demand or other positive pressure mode.
Greater than 100,000 $\mu g/m^3$.	Full face, self contained breathing apparatus, pressure demand mode.

HEPA A high efficiency particulate filter air (HEPA) is one that is 99.97% efficient against particles 0.3 microns or larger.